## **Congenital Dislocation of the Hip**

## A Study of Open Reduction After Failure of Conservative Treatment

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In SPITE OF EARLY, intelligent and persistent conservative treatment of congenital dislocation of the hip, failures of closed reduction still sometimes occur. Why is this so? What is the next step after failure becomes apparent? Should open reduction be done without delay or would it be better to wait? Is there an optimum time for operation? What are the results of operation?

In search of answers we reviewed the records of 42 patients operated upon at the Children's Hospital, Los Angeles, from 1934 to 1956. Thirty-three of the patients were female and nine male. In 21 cases both hips were dislocated, in 28 cases one hip; the total number of hips treated being 49. The average age at diagnosis was 23 months, 18 months in the unilateral group (since the deformity was more evident) and 32 months in the bilateral. The average age of patients at operation was 38 months; the lowest age was seven months and the highest almost ten years. There were no serious complications and no operative deaths.

Closed reduction was tried at least once and often several times before open operation was carried out. No harm from these procedures was observed. In most cases traction also preceded operation. The anterofemoral incision of Smith-Petersen gave adequate exposure.

The pathologic changes observed at operation were complex. All the structures of the hip were involved in varying degrees. There seemed to be no single pathological entity constantly associated with failure of closed reduction. Extracapsular conditions noted were adductor shortening, adhesions of capsule to ilium, pronounced anteversion of femoral neck, thickened redundant capsule and iliopsoas shortening. Conditions observed within the joint were of pericapital adhesions, abnormalities of the femoral head, annular constriction of capsule, enlarged ligamentum teres, inverted limbus, fibro-fatty tissue in the acetabulum and shallow acetabulum.

In 36 of 49 operations, the dislocation was successfully reduced. In the remaining 13 instances, dislocation occurred again immediately after operation or in the postoperative period before removal of the cast. From analysis of these 13 immediate failures

• In a study of 42 cases in which open reduction of congenital dislocation of the hip was carried out after conservative treatment had failed, the following observations were made (in a relatively short period of follow-up observation):

No one pathological change, as observed at operation, was inordinately associated with failure of closed reduction.

By far the highest incidence of successful results of open reduction was obtained in cases in which the operation was done in the second and third year of life.

The highest incidence of successful operation, as appraised immediately after the procedure, was in patients more than one year and less than six years of age.

Results as determined roentgenographically were in close agreement with results observed clinically.

it appeared that the age of the patient was an important factor—that the best chance for immediate successful operation was in patients over one year and under six years of age (see Chart 1).

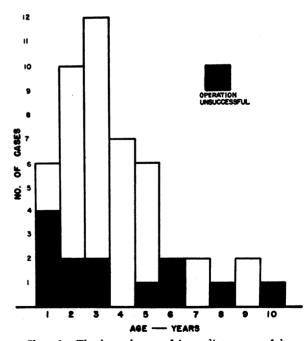


Chart 1.—The best chance of immediate successful operation appeared to be when the patient is over one year and under six years of age.

Submitted February 26, 1958.

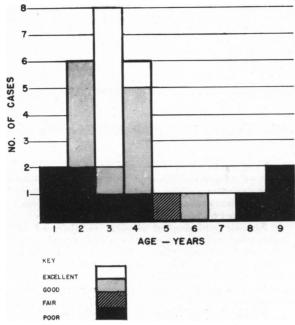


Chart 2.—The best results as observed in x-ray films occurred when operation was done in the third year of life.

Personal continuing observation was possible in 28 instances (including some cases in which both hips were involved). The average length of follow-up was more than five years and in no case less than 15 months. It is recognized that this is a short term follow-up.

Roentgenographically the results in eight cases (30 per cent) were excellent—the hip was of normal appearance. In ten cases (35 per cent) the result was good—slight deformity or dysplasia was noted in four cases (15 per cent) fair, subluxation being observed. In six cases (20 per cent) the operation was a failure, with either dislocation or fusion observable in x-ray films. The best results as

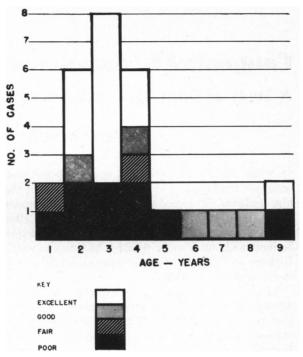


Chart 3.—The best clinical results occurred when operation was done in the second and third years of life.

determined by x-ray films were obtained in cases in which operation was done in the third year of life; the poorest in operations on patients under one year and over four years of age (see Chart 2).

Twelve of the patients (40 per cent) had no clinical complaints on follow-up examination. Six (20 per cent) had a good result, with slight discomfort or limp; one had a limp and pain. In nine cases (33 per cent) the operations were considered failures. The clinical results (Chart 3) paralleled the results as observed roentgenographically. The best clinical results occurred when operation was done in the second and third years of life.

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## **Social Security Footnotes**

EVERY ARGUMENT which has ever been used to support Social Security can be used with equal validity to support socialized medicine by changing a few words. If you ask for the one, prepare to get both. It is planned that way.

-From the Department of Public Relations, American Medical Association